

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A tool exchange device, comprising:

step portions ~~(5a, 5b)~~ with an L-shaped section having vertical restriction surfaces ~~(6)~~ diametrically opposing and parallel to each other and horizontal engagement surfaces ~~(7)~~ directed radially outwardly from the lower ends on both sides of a main body portion ~~(2)~~ of a tool~~(1)~~;

a first engagement member ~~(13)~~ provided on one side of a holding portion ~~(11)~~ that places and holds a tool ~~(1)~~ for exchange, the first engagement member ~~(13)~~ having a first engagement projection piece ~~(12)~~ opposing the engagement surface ~~(7)~~ of one ~~(5a)~~ of the step portions and having its end surface ~~(12a)~~ in abutment against the restriction surface ~~(6)~~;

a second engagement member ~~(15)~~ provided on the other side of the holding portion ~~(11)~~, the second engagement member ~~(15)~~ having a second engagement projection piece ~~(14)~~ having its intermediate part opposed to the engagement surface ~~(7)~~ of the other ~~(5b)~~ of the step portions, and having its end surfaces ~~(14a)~~ on both sides in abutment against the outer periphery of the main body portion ~~(2)~~ on the both sides of the step portion ~~(5b)~~; and

a moving unit which moves the first and second engagement members ~~(13, 15)~~ between an engagement position and a withdrawal position with respect to the step portions ~~(5a, 5b)~~.

2. (Currently Amended) The tool exchange device according to claim 1, wherein the moving unit includes:

a moving guide ~~(21a, 21b, 22a, 22b)~~ that movably supports the first and second engagement members ~~(13, 15)~~ between the engagement position and the withdrawal position;

an energizing unit ~~(24, 26)~~ ~~for energizing~~ that energizes the first and second engagement members ~~(13, 15)~~ to move toward the engagement position;

wedge members ~~(29)~~ engageable with engagement rollers ~~(27a, 27b)~~ provided at the first and second engagement members ~~(13, 15)~~; and

a moving unit ~~(31)~~ for the wedge members ~~(29)~~, ~~and~~ wherein the energizing force by the energizing ~~means (24)~~ unit for the first engagement member ~~(13)~~ is set greater than the energizing force by the energizing unit ~~(26)~~ for the second engagement member ~~(15)~~.

3. (Currently Amended) A tool, ~~(1)~~ comprising:

a grip portion ~~(3)~~ to be gripped by a head ~~(H)~~ at the top of a main body portion ~~(2)~~ with an approximately circular shape in a plan view; and an operation portion ~~(4)~~ underneath,

wherein notches ~~(8a, 8b)~~ having step portions ~~(5a, 5b)~~ with an L-shaped section are provided at both sides of the main body portion ~~(2)~~, the step portions ~~(5a, 5b)~~ include vertical restriction surfaces ~~(6)~~ diametrically opposing and parallel to each other, and horizontal engagement surfaces ~~(7)~~ directed radially outwardly are provided at the lower ends of the vertical restriction surfaces ~~(6)~~.